Eubyja cognataria Guen.

Larva, two specimens—Body thick and of uniform width, carinated on the sides; brown tinged with olivaceous and punctated with dark brown, thickest on the back and anterior part of the segments. On the first ring are two small angular tubercles, and two still smaller sub-dorsal conical ones on the 8th. The 11th segment is slightly humped and on the back are two large, kidney-shaped, pale ochreous spots, which are edged with dark brown; and there are two small dorsal grayish spots on the anterior part of each ring. The tubercles on the first ring are brown tipped with reddish, and those on the 8th are gray thickly spotted with black. Spiracles red. Head sub-quadrate, deeply bifid, with a crescent-shaped indenture in the middle of the front; color yellowish brown, banded with darker brown and the lobes tipped with dull red. Feeds on apple and pear trees. One specimen became fully grown Aug. 18th, and the other Sept. 16th, and measured respectively 2.3 and 2.4 inches in length.

Pupa—Length 0.7 inch, obtuse, dark shining brown; subterranean. Imagines last of June.

Cymatophora crepuscularia Pack.

Larva, one specimen—Body smooth and of uniform thickness; pale yellow on the sides, shading to creamy white above; a straight, light brown stripe on the back, and below this, situated close together, are several narrower, wavy, dark brown stripes. All the stripes are obsolete on the last segment. Head roundish, a little wider than the body and reddish brown in color. Venter bluish white. Found May 30th, on the plum tree. Length when fully grown, 1.3 inches. Pupated June 6th.

Pupa—Length, 0.5 inch, of the usual form and color; subterranean. Imago June 19th.

NEW SPECIES OF ACOPA AND HELIOTHIS, AND NOTE ON HAMADRYAS.

BY A. R. GROTE, A. M.,

Director of the Museum, Buffalo Society Natural Sciences.

In Acopa carina Harvey, from Texas, the accessory cell on the primaries is smaller than in a new species which I have received from Prof.

Snow from Southern Kansas. In this genus the body is linear and slight, tibiæ unarmed, ocelli small, male antennæ brush-like with distinct joints, thorax with a tuft behind, abdomen untufted, linear. Fore wings 12-veined with accessory cell, from the outer apex of which spring veins 7 and 8; 9 out of 8, a long furcation to costa. Hind wings 7-veined; median vein 3-branched; 8 out of 7 not far from the base. Primaries with oblique outer margin and produced apices. Front with a clypeal plate. Labial palpi narrow, linear, improminent; legs slender, tibiæ unarmed.

Acopa perpallida, n. s.

& \(\mathbb{Q} \). Larger than carina, with white secondaries. Primaries white, shaded with ochrey and with narrow fuscous lines. Basal line indicated; anterior line upright, forming two large teeth; outer line denticulate, outwardly produced opposite the cell; orbicular obsolete, reniform concolorous, obscured by a dark shade. Subterminal shade line fuscous, even, continued to vein 7 from internal angle, above which it appears as an inwardly oblique shade from costa to vein 7. A terminal interrupted line; fringes white. Hind wings white, very slightly soiled, with discal mark and in distinct line; fringes white. Beneath yellowish white, shaded with fuscous on primaries; fringes white. Body whitish. Expanse 28 mil.

The median lines on primaries are further apart than in *carina*. This species was sent me by Prof. Snow under the number 524.

Heliothis nuchalis, n. s.

&. Wings ample; body comparatively slight. Eyes naked. All the tibiae armed; fore tibiae with an inner terminal spine and an outer one of same size, the latter followed by two smaller spinules. Fore wings with pale whitish ochrey ground, much shaded with fuscous. All three stigmata present, very large, sub-equal, and dark. The reniform has an internal annulus and a central pale streak, likewise the smaller rounded orbicular; the broad claviform is cut by the narrow submedian shade. Posterior line narrow, fuscous, angulated on subcostal vein, roundedly produced opposite cell, interrupted by the pale marked veins. The terminal fuscous field is cut by the whitish subterminal shade; fringes dark. Hind wings whitish ochreous, with thick discal mark, central discally angulated line and with a series of irregular pale interspaceal blotches cutting the fuscous terminal shading of the wing; fringes white, interlined at base. Beneath whitish with faint ochrey tinge. Discal marks large,

black, distinct on fore wings. Outer line narrow, distinct, discally bent; subterminal shading obvious. On the secondaries there is a discal mark, a central narrow uneven line and terminal shading; fringes white with faint interline. On fore wings the fringes are here whitish at base. Body whitish beneath, above fuscous. *Expanse* 33 mil. Prof. Snow, Kansas, number 371.

This species is wider winged and smaller bodied than *cupes*, differs by the presence of the large claviform and in the armature of the fore tibiæ. The fuscous margin of the hind wings above is much more broken up with pale blotches than in *umbrosus* and *phlogophagus*.

Fam. TINEIDÆ.

For Dr. Clemens' genus *Hamadryas*, preoccupied in the Lepidoptera by Hübner and Boisduval, I propose the generic name *Euclemensia* for *E. Bassettella*.

NOTES UPON GRAPTAS COMMA AND INTERROGATIONIS.

BY W. H. EDWARDS, COALBURGH, W. VA.

I. COMMA; dimorphic forms HARRISH and DRYAS, both figured in But. N. A., Vol. 1.

In Can. Ent., v., 184, Oct., 1873, I gave the result of breeding this species from eggs laid by the form dryas, viz., 6 dryas, but many more of Harrisii, establishing the dimorphism. Since that time I have raised several broods from the egg, and both before and after 1873 recorded in my journal the history of several lots of larvæ found by me. I have therefore some material for illustrating the peculiarities of the species. At Coalburgh there are three broods annually, and the butterflies of the third brood hybernate. The hybernating females deposit their eggs last of April or early in May, and the first brood of the butterflies emerges from chrysalis about 1st June; but should the weather be cold during May, then from the middle to last of June.